

WORKING GROUP MEETING THURSDAY JANUARY 17, 2002

SWANSEA RECREATION CENTER 2659 EAST 49TH AVENUE 9:00 AM- 12:00 noon

EPA has identified its "preferred alternative" for cleanup of the residential soils at the VB/I-70 Site.

EPA is currently preparing a fact sheet which describes the preferred alternative, as well as all the alternatives that were considered. When it is finished, EPA will distribute the fact sheet, called the "proposed plan", to the VB/I-70 community.

Everyone who is interested will be invited to comment on the proposed plan during a 60-day public comment period. The proposed plan will also have information on the dates of the public comment period, how to comment, and where to get more information. EPA hopes to mail the proposed plan in February.

The proposed plan is NOT EPA's final cleanup decision. EPA will make the final cleanup decision only after public comments are received and considered.

EPA would like to devote most of this meeting to a discussion of the cleanup alternatives since there still is some confusion about them.

The other planned agenda item is a discussion of the questions raised by the Clayton, Elyria, and Swansea Environmental (CEASE) Coalition at the last working group meeting.

PROPOSED AGENDA ITEMS

1.	Definition and Discussion of Cleanup Alternatives	(9:00 - 9:45)
2.	Discussion of Questions from CEASE Coalition	(9:45-11:00)
3.	Community Issues Bring in outside Speakers	(11:00 -11:30)
4.	Updates	(11:30- 12:00)

What is Cleanup Alternative 2?

Alternative 2 is a combination of three actions:

- Soil tilling with phosphate amendments to treat soil with lead greater than 540 parts per million: Surface soils will be tilled to a depth of 6 inches and treated with phosphate. After treatment, yard features will be restored. The goal of this action is to lower the lead levels to background levels by mixing the top few inches of soil with cleaner soil below. The phosphate treatment reduces the amount of lead in soil that can be absorbed in the body even if someone ingests the lead from soil.
- Soil removal, off site disposal, and replacement of soil with arsenic greater than 240 parts per million: Soil will be removed to a depth of 12 inches and transported offsite for disposal at an appropriate facility. The excavated areas will be backfilled with clean soil.
- 3 Community Health Program: There are 3 components of this program: (1) health education; (2) biomonitoring; and (3) response.

<u>Health education</u> includes both individual and community education to raise awareness about how people come in contact with arsenic and lead, how to identify soil pica behavior, strategies to reduce or avoid exposure, and the health effects of exposure. This general awareness will help reduce exposure and also will increase the number of residents who participate in the second component.

Biomonitoring, includes testing children to determine the amount of arsenic in their urine and/or lead in their blood. These measurements will indicate whether individual children have recently been exposed to arsenic or lead. EPA will organize the testing to emphasize yearly tests to coincide with other community activities that occur with the start of the school year. Testing will also be available at any time of the year. If any children are identified with higher than typical exposure to arsenic or lead, they will be followed up by EPA in the third component.

Response Program The first response will be to refer children to a physician if the exposure is judged to be of health concern. In all cases, EPA will investigate the child's house (take samples, interview caretakers, etc.) to look for soil and non-soil sources of arsenic or lead. If soil is found to be the source of exposure, EPA will identify the most effective way to remove the problem and will implement it. In the response program, EPA will address exterior lead paint if it is found to be the main source of soil contamination and soil is the main source of child exposure to lead. For non-soil related sources of arsenic or lead, EPA will refer residents to other agencies with programs that may assist them. The Superfund program is not authorized to clean up non-soil sources of lead or arsenic.

How many properties would have Superfund action in Alternative 2?

Soil Tilling & Treatment (lead > 540 parts per million): 89 properties

Soil Removal, Disposal,

& Replacement: (arsenic > 240 parts per million): 113 properties

Community Health

Program (arsenic > 47 parts per million lead > 208 parts per million): 1920 properties

How will Alternative 2 address the health risks at VB/I-70?

The Community Health Program will provide Superfund action at specific properties where either theoretical calculations suggest unacceptable risk to children with <u>soil pica behavior</u> or <u>where children may potentially be exposed to lead from multiple sources</u> and where testing of children's urine and/or blood indicates higher than typical exposure to arsenic or lead. The Community Health program will continue until EPA demonstrates that its health goals for protection of children from acute arsenic effects and elevated blood lead levels from soil exposure are met.

EPA knows that the testing in the community health program will <u>not</u> detect exposure to arsenic at levels associated with unacceptable cancer risk because such exposures are low and occur over a long time. So, to address <u>unacceptable cancer risk</u> (> 1 in 10,000) to long term residents, this alternative also includes soil removal at those properties where <u>arsenic levels exceed 240 parts per million</u>.

Finally, EPA determined that properties where <u>lead levels exceed 540 parts per million</u> should be cleaned up even if community blood lead tests don't show that exposure to lead is high. So, this alternative also includes soil tilling and treatment at properties where lead levels exceed 540 parts per million to protect children from the <u>potential for elevated blood lead levels from exposure to soil</u>.

Either soil removal and disposal or soil tilling and treatment will be required at 202 properties under Alternative 2.

How much will Alternative 2 cost?

EPA estimates that Alternative 2 will cost \$10.6 million.

What is Cleanup Alternative 3?

Alternative 3 is a combination of two actions:

- ① Soil removal, off site disposal, and replacement of soil with arsenic greater than 240 parts per million and/or lead greater than 540 parts per million: Soil will be removed to a depth of 12 inches and transported offsite for disposal at an appropriate facility. The excavated areas will be backfilled with clean soil.
- 2 Community Health Program: There are 3 components of this program: (1) health education; (2) biomonitoring; and (3) response.

<u>Health education</u> includes both individual and community education to raise awareness about how people come in contact with arsenic and lead, how to identify soil pica behavior, strategies to reduce or avoid exposure, and the health effects of exposure. This general awareness will help reduce exposure and also will increase the number of residents who participate in the second component.

Biomonitoring, includes testing children to determine the amount of arsenic in their urine and/or lead in their blood. These measurements will indicate whether individual children have recently been exposed to arsenic or lead. EPA will organize the testing to emphasize yearly tests to coincide with other community activities that occur with the start of the school year. Testing will also be available at any time of the year. If any children are identified with higher than typical exposure to arsenic or lead, they will be followed up by EPA in the third component.

Response Program The first response will be to refer children to a physician if the exposure is judged to be of health concern. In all cases, EPA will investigate the child's house (take samples, interview caretakers, etc.) to look for soil and non-soil sources of arsenic or lead. If soil is found to be the source of exposure, EPA will identify the most effective way to remove the problem and will implement it. In the response program, EPA will address exterior lead paint if it is found to be the main source of soil contamination and soil is the main source of child exposure to lead. For non-soil related sources of arsenic or lead, EPA will refer residents to other agencies with programs that may assist them. The Superfund program is not authorized to clean up non-soil sources of lead or arsenic.

How many properties would have Superfund action in Alternative 3?

Soil Removal, Disposal,

& Replacement: (arsenic > 240 parts per million

and/or lead > 540 parts per million):

properties

202

Community Health

Program (arsenic > 47 parts per million

lead > 208 parts per million):

1920

properties

How will Alternative 3 address the health risks at VB/I-70?

The Community Health Program will provide Superfund action at specific properties where either theoretical calculations suggest unacceptable risk to children with <u>soil pica behavior</u> or <u>where children may potentially be exposed to lead from multiple sources</u> and where testing of children's urine and/or blood indicates higher than typical exposure to arsenic or lead. The Community Health program will continue until EPA demonstrates that its health goals for protection of children from acute arsenic effects and elevated blood lead levels from soil exposure are met.

EPA knows that the testing in the community health program will <u>not</u> detect exposure to arsenic at levels associated with unacceptable cancer risk because such exposures are low and occur over a long time. So, to address <u>unacceptable cancer risk</u> (> 1 in 10,000) to long term residents, this alternative also includes soil removal at those properties where <u>arsenic levels exceed 240 parts per million</u>.

Finally, EPA determined that properties where <u>lead levels exceed 540 parts per million</u> should be cleaned up even if community blood lead tests don't show that exposure to lead is high. So, this alternative also includes soil removal at properties where lead levels exceed 540 parts per million to protect children from the potential for elevated blood lead levels from exposure to soil.

Soil removal and disposal will be required at 202 properties under Alternative 3. Of these properties, 105 require removal because of arsenic levels, 8 require removal because of arsenic and lead levels, and 89 require removal because of lead levels.

How much will Alternative 3 cost?

EPA estimates that Alternative 3 will cost \$11.1 million.

What is Cleanup Alternative 4?

Alternative 4 is a combination of two actions:

- ① Soil removal, off site disposal, and replacement of soil with arsenic greater than 128 parts per million and/or lead greater than 540 parts per million: Soil will be removed to a depth of 12 inches and transported offsite for disposal at an appropriate facility. The excavated areas will be backfilled with clean soil.
- 2 Community Health Program: There are 3 components of this program: (1) health education; (2) biomonitoring; and (3) response.

<u>Health education</u> includes both individual and community education to raise awareness about how people come in contact with arsenic and lead, how to identify soil pica behavior, strategies to reduce or avoid exposure, and the health effects of exposure. This general awareness will help reduce exposure and also will increase the number of residents who participate in the second component.

Biomonitoring, includes testing children to determine the amount of arsenic in their urine and/or lead in their blood. These measurements will indicate whether individual children have recently been exposed to arsenic or lead. EPA will organize the testing to emphasize yearly tests to coincide with other community activities that occur with the start of the school year. Testing will also be available at any time of the year. If any children are identified with higher than typical exposure to arsenic or lead, they will be followed up by EPA in the third component.

Response Program The first response will be to refer children to a physician if the exposure is judged to be of health concern. In all cases, EPA will investigate the child's house (take samples, interview caretakers, etc.) to look for soil and non-soil sources of arsenic or lead. If soil is found to be the source of exposure, EPA will identify the most effective way to remove the problem and will implement it. In the response program, EPA will address exterior lead paint if it is found to be the main source of soil contamination and soil is the main source of child exposure to lead. For non-soil related sources of arsenic or lead, EPA will refer residents to other agencies with programs that may assist them. The Superfund program is not authorized to clean up non-soil sources of lead or arsenic.

How many properties would have Superfund action in Alternative 4?

Soil Removal, Disposal,

& Replacement:

(arsenic > 128 parts per million

and/or lead > 540 parts per million):

403

properties

Community Health

Program

(arsenic > 47 parts per million

lead > 208 parts per million):

1920

properties

How will Alternative 4 address the health risks at VB/I-70?

The Community Health Program will provide Superfund action at specific properties where either theoretical calculations suggest unacceptable risk to children with <u>soil pica behavior</u> or <u>where children may potentially be exposed to lead from multiple sources</u> and where testing of children's urine and/or blood indicates higher than typical exposure to arsenic or lead. The Community Health program will continue until EPA demonstrates that its health goals for protection of children from acute arsenic effects and elevated blood lead levels from soil exposure are met.

EPA knows that the testing in the community health program will <u>not</u> detect exposure to arsenic at levels associated with unacceptable cancer risk because such exposures are low and occur over a long time. So, to address <u>unacceptable cancer risk</u> (> 1 in 10,000) to long term residents, this alternative also includes soil removal at those properties where <u>arsenic levels exceed 128 parts per million</u>. The cancer risk associated with this level of arsenic in soil is 8 in 100,000. The State of Colorado requested that EPA consider an alternative in which 128 parts per million arsenic is the trigger for soil removal.

Finally, EPA determined that properties where <u>lead levels exceed 540 parts per million</u> should be cleaned up even if community blood lead tests don't show that exposure to lead is high. So, this alternative also includes soil removal at properties where lead levels exceed 540 parts per million to protect children from the <u>potential for elevated blood lead levels from exposure to soil.</u>

Soil removal and disposal will be required at 403 properties under Alternative 4. Of these properties, 306 require removal because of arsenic levels, 31 require removal because of both arsenic and lead levels, and 66 require removal because of lead levels.

How much will Alternative 4 cost?

EPA estimates that Alternative 4 will cost \$17.5 million.

What is Cleanup Alternative 5?

Soil removal, off site disposal, and replacement of soil with arsenic greater than 47 parts per million and/or lead greater than 208 parts per million: Soil will be removed to a depth of 12 inches and transported offsite for disposal at an appropriate facility. The excavated areas will be backfilled with clean soil.

How many properties would have Superfund action in Alternative 5?

Soil Removal, Disposal,

(arsenic > 47 parts per million

2,122

& Replacement:

and/or lead > 208 parts per million):

properties

How will Alternative 5 address the health risks at VB/I-70?

Soil will be removed from properties where either theoretical calculations suggest unacceptable risk to children with soil pica behavior or where children may potentially be exposed to lead from multiple sources. Soil removal at these properties will also protect long term residents from unacceptable cancer risk (> 1 in 10,000).

Soil removal and disposal will be required at 2,122 properties under Alternative 5. Of these properties, 384 require removal because of arsenic levels, 479 require removal because of arsenic and lead levels, and 1259 require removal because of lead levels.

How much will Alternative 5 cost?

EPA estimates that Alternative 5 will cost \$61 million.